



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink-L21

Issued: 13 March 2021 / 0800L (1300Z)

Valid: 14 March 2021 / 0444 - 0645L (0844 - 1045Z)



Forecast Discussion: High pressure at the surface continues to dominate the weather across the Space Coast. It has maintained easterly low level flow across the area and has kept skies mostly clear during the day and partly cloudy during the night time hours. Expect this trend to continue Sunday morning as the high pressure remains in firm control. During the early morning hours on Sunday, expect scattered low level clouds with isolated, brief showers possible over the water. If any precipitation makes its way inland, they should quickly dissipate after moving inland. The primary concern for Sunday morning will be the Cumulus Cloud Rule.

In the event of a 24-hour delay, the high will remain in place over the region. A storm system is expected to move from the southern Plains into the lower Mississippi Valley through early Monday morning. The only effect this system is expected to have on our area is to veer the winds to a southeasterly direction and strengthening them slightly. Otherwise, weather conditions are expected to remain similar to Sunday morning. The primary concerns will be from the Cumulus Cloud Rule and Liftoff Winds.

		Probability of Violating Weather Constraints					
Launch Day	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low		
	Temp/Humidity: 60°F / 96%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 100° 10 – 15 mph	Stratocumulus	Scattered	4,500	5,500	Solar Activity: Low		
		Probability of Violating Weather Constraints					
24-Hour Delay	10%	Primary Concerns: Cumulus Cloud Rule, Liftoff Winds					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low		
	Temp/Humidity: 56°F / 90%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 130° 12 - 17 mph	Cumulus	Scattered	4,000	5,500	Solar Activity: Low		
<p>Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.</p>							
Next Forecast Will Be Issued		As required					